A. Clean Version of Replacement Paragraph/Section/Claim with Instructions for Entry

Please amend the application as follows:

In the Claims:

Claims 1-30 from the Annex to the Preliminary Examination Report, as amended by the Preliminary Amendment filed with the application, read as follows:

1. A light source, comprising an evacuated container having walls, at least a portion of which comprises an outer glass layer (23, 23') which on at least part thereof is coated on the inside with a layer of phosphor (24, 24') forming a luminescent layer, and a conductive layer (25, 25') forming an anode, which layer of phosphor (24, 24') is excited to luminescence by electron bombardment from a field emission cathode (40, 40') located in the interior of the container,

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the field emission cathode (40, 40') comprises an elongate wire-shaped carrier having a cylindrical surface and a first longitudinal axis,

at least a portion of said cylindrical surface being provided with conductive surface irregularities in the form of carbon nanotubes, each having a second longitudinal axis being essentially perpendicular to the first longitudinal axis, free ends of said nanotubes forming tips having a radial extension less than about 10 µm.

2. The light source according to claim 1, wherein the cylindrical surface has a diameter in the range of 0,5-5 mm.

3. The light source according to claim 1, wherein the elongate carrier is made of a conductive material.

4. The light source according to claim 1, wherein the elongate carrier is made of a semi-conductive material.

5. The light source according to claim 1, wherein the elongate carrier is made of an insulating material.

6. The light source according to claim 1, wherein the container has a cylindrical shape and a diameter in the range 8-80 mm.

7. The light source according to claim 1, wherein the elongate carrier is coaxially arranged in the container.

8. The light source according to claim 1, wherein the elongate carrier is eccentrically arranged in the container.

9. The light source according to claim 1, wherein the elongate carrier has an essentially circular cross section.

10. The light source according to claim 1, wherein the elongate carrier has a non-circular cross section with a smooth curve, e.g. elliptical.

11. The light source according to claim 1, wherein the elongate carrier comprises a wire.

12. The light source according to claim 1, wherein the elongate carrier comprises a rod.

13. The light source according to claim 1, wherein the tips have a radius of curvature being in the range 0,1-100 nanometers.

14. The light source according to claim 13, wherein said nanotubes are arranged on the carrier in the form of a deposited nanotube film.

15. The light source according to claim 1, wherein the tips are essentially uniformly distributed around the carrier.

16. The light source according to claim 1, wherein

the luminescent layer (24) is arranged between the glass layer (23) and the anode (25), and

the anode (25) is made of a reflective material for reflection of the light emitted from the luminescent layer (24).

17. The light source according to claim 1, wherein

the anode (25') is arranged between the glass layer (23') and the luminescent layer (24'), and

the anode (25') is made of a transparent material.

18. The light source according to claim 1, wherein the phosphor layer is formed by a conductive phosphor and the phosphor layer also forms the anode.

19. The light source according to claim 1, wherein the phosphor layer is formed by a conductive phosphor and the phosphor layer also forms the anode.

20. The light source according to claim 1, wherein the container has the shape of a curved tube, curved in e.g. a circular or semicircular curve.

21. A field emission cathode (40), for use in a light source, and to be at least partially encompassed by an anode, and comprising an elongate electrically conductive means,

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said elongate electrically conductive means has the form of a cylindrical surface having a first longitudinal axis, and

at least a portion of said cylindrical surface being provided with conductive surface irregularities in the form of carbon nanotubes, each having a second longitudinal axis being essentially perpendicular to the first longitudinal axis, free ends of said nanotubes forming tips having a radial extension less than about 10 μm.

22. The field emission cathode according to claim 21, wherein the elongate wire-shaped carrier is made of a conductive material.

23. The field emission cathode according to claim 21, wherein the elongate wire-shaped carrier is made of a semi-conductive material.

24. The field emission cathode according to claim 21, wherein the elongate wire-shaped carrier is made of an insulating material.

25. The field emission cathode (40) according to claim 21, wherein the cathode is to be at least partially encompassed by an anode having a cylindrical shape and a diameter in the range 8-80 mm.

26. The field emission cathode (40) according to claim 21, wherein the elongate carrier has an essentially circular cross section.

27. The field emission cathode (40) according to claim 21, wherein the elongate carrier has a non-circular cross section with a smooth curve, e.g. elliptical.

28. The field emission cathode according to claim 21, wherein the elongate carrier comprises a wire.

29. The field emission cathode according to claim 21, wherein the elongate carrier comprises a rod.

30. The field emission cathode according to claim 21, wherein the tips have a radius of curvature being in the range 0,1-100 nanometres.

Please renumber claims 32-53 as claims 31-51:

31. The field emission cathode according to claim 21, wherein said nanotubes are arranged on the carrier in the form of a deposited nanotube film.

32. The field emission cathode according to claim 21, wherein the tips are essentially uniformly distributed around the carrier.

33. A light source, comprising an evacuated container having walls, at least a portion of which comprises an outer glass structure (23") which on at least part thereof is coated on the inside with a layer of phosphor (24") forming a luminescent layer, and a conductive layer (25") forming an anode, which layer of phosphor (24") is excited to luminescence by electron bombardment from a field emission cathode (40") located in the interior of the container,

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the field emission cathode (40") comprises a carrier, at least partly taking the form of a sphere, and

at least a portion of the surface of said sphere being provided with conductive surface irregularities in the form of carbon nanotubes, each having a longitudinal axis being essentially perpendicular to the surface of the carrier, the free ends of said nanotubes forming tips having a radial extension less than about 10 μm.

34. The light source according to claim 33, wherein said carrier is made of a conductive material.

35. The light source according to claim 33, wherein said carrier is made of a semi-conductive material.

36. The light source according to claim 33, wherein said carrier is made of an insulating material.

37. The light source according to claim 33, wherein the container at least partly takes the form of a sphere having a radius within the range of 1-10 cm.

38. The light source according to claim 33, wherein the carrier is arranged in the center of the container.

39. The light source according to claim 33, wherein the carrier is eccentrically arranged in the container.

40. The light source according to claim 33, wherein the tips have a radius of curvature being in the range 0,1-100 nanometers.

41. The light source according to claim 33, wherein the tips are essentially uniformly distributed on said portion and the surface of said sphere being provided with surface irregularities.

42. The light source according to claim 33, wherein the luminescent layer (24") is arranged between the glass structure (23") and the anode (25"), and the anode (25") is made of a reflective material for reflection of the light emitted from the luminescent layer (24").

43. The light source according to claim 33, wherein the anode is arranged between the glass structure and the luminescent layer, and the anode is made of a transparent material.

44. The light source according to claim 33, wherein the phosphor layer is formed by a conductive phosphor and the phosphor layer also forms the anode.

45. A field emission cathode (40"), for use in a light source, and to be at least partially encompassed by an anode, and comprising further means,

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said further means includes conductive surface irregularities in the form of carbon nanotubes, each being provided on at least a portion of a carrier including a spherical surface and having a longitudinal axis being essentially perpendicular to the surface of the carrier, and the free ends of said nanotubes forming tips having a radial extension less that about 10 µm.

46. The field emission cathode according to claim 45, wherein said carrier is made of a conductive material.

47. The field emission cathode according to claim 45, wherein said carrier is made of a semi-conductive material.

48. The field emission cathode according to claim 45, wherein said carrier is made of an insulating material.

49. The field emission cathode (40") according to claim 45, wherein the cathode is to be at least partially encompassed by an anode at least partly taking the form of a sphere having a radius within the range of 1-10 cm.

50. The field emission cathode according to claim 45, wherein the tips have a radius of curvature being in the range 0,1-100 nanometers.

51. The field emission cathode according to claim 45, wherein the tips are essentially uniformly distributed on said portion and the surface of said sphere being provided with surface irregularities.